

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A reflective or semi-reflective coating for optical storage media, low emissivity glass, transparent conductive displays, and electro-chromic mirrors, said coating comprising an alloy comprising:

silver in an amount of between approximately 45% by weight and approximately 99.9% by weight;

copper in an amount of between approximately 0.01% by weight and approximately 55% by weight; and

zinc in an amount of between approximately 0.01% by weight and approximately 55% by weight[[.]]; and

tin in an amount of between approximately 0.01% by weight and approximately 30% by weight:

wherein copper is present in said alloy in an amount greater than about 5.0 atomic percent.

Claim 2 (canceled)

Claim 3 (previously presented): The coating of claim 1, further comprising silicon.

Claim 4 (canceled)

Claim 5 (canceled)

Claim 6 (previously presented): The coating of claim 1, wherein said silver is between approximately 55% by weight and approximately 95% by weight.

Claim 7 (previously presented): The coating of claim 6, wherein said silver is between approximately 90% by weight and approximately 95% by weight.

Claim 8 (canceled)

Claim 9 (canceled)

Claim 10 (canceled)

Claim 11 (canceled)

Claim 12 (previously presented): The coating of claim 3, wherein said silver is between approximately 55% by weight and approximately 95% by weight.

Claim 13 (previously presented): The coating of claim 12, wherein said silver is between approximately 90% by weight and approximately 95% by weight.

Claim 14 (canceled)

Claim 15 (canceled)

Claim 16 (canceled)

Claim 17 (canceled)

Claim 18 (previously presented): The coating of claim 1, wherein said copper is between approximately 0.01% by weight and approximately 10% by weight.

Claim 19 (previously presented): The coating of claim 18, wherein said copper is between approximately 0.25% by weight and approximately 5% by weight.

Claim 20 (canceled)

Claim 21 (canceled)

Claim 22 (canceled)

Claim 23 (canceled)

Claim 24 (previously presented): The coating of claim 3, wherein said copper is between approximately 0.01% by weight and approximately 10% by weight.

Claim 25 (previously presented): The coating of claim 24, wherein said copper is between approximately 0.25% by weight and approximately 5% by weight.

Claim 26 (canceled)

Claim 27 (canceled)

Claim 28 (canceled)

Claim 29 (canceled)

Claim 30 (previously presented): The coating of claim 1, wherein said zinc is in an amount of between approximately 0.01% by weight and approximately 10% by weight.

Claim 31 (previously presented): The coating of claim 30, wherein said zinc is in an amount of between approximately 0.25% by weight and approximately 5% by weight.

Claim 32 (canceled)

Claim 33 (canceled)

Claim 34 (canceled)

Claim 35 (canceled)

Claim 36 (previously presented): The coating of claim 3, wherein said zinc is in an amount of between approximately 0.01% by weight and approximately 10% by weight.

Claim 37 (previously presented): The coating of claim 36, wherein said zinc is in an amount of between approximately 0.25% by weight and approximately 5% by weight.

Claim 38 (canceled)

Claim 39 (canceled)

Claim 40 (canceled)

Claim 41 (canceled)

Claim 42 (currently amended): The coating of claim 44 1, wherein said tin is between approximately 0.01% by weight and approximately 10% by weight.

Claim 43 (previously presented): The coating of claim 42, wherein said tin is between approximately 0.01% by weight and approximately 2% by weight.

Claim 44 (canceled)

Claim 45 (canceled)

Claim 46 (canceled)

Claim 47 (currently amended): The coating of claim 3, wherein said silicon ~~in an amount of is~~ between approximately 0.01% by weight and approximately 30% by weight.

Claim 48 (previously presented): The coating of claim 47, comprising silicon in an amount of between approximately 0.01% by weight and approximately 10% by weight.

Claim 49 (previously presented): The coating of claim 48, comprising silicon in an amount of between approximately 0.01% by weight and approximately 1% by weight.

Claim 50 (canceled)

Claim 51 (canceled)

Claim 52 (canceled)

Claim 53 (currently amended): A reflective or semi-reflective coating for optical storage media, low emissivity glass, transparent conductive displays, and electro-chromic mirrors, said coating comprising an alloy comprising:

silver in an amount of between approximately 45% by weight and approximately 99.9% by weight;

copper in an amount of between approximately 0.01% by weight and approximately 55% by weight;

zinc in an amount of between approximately 0.01% by weight and approximately 55% by weight; and

~~at least one metal selected from the group consisting of silicon and tin~~ in an amount of between approximately 0.01% by weight and 30% by weight[.];

wherein copper is present in said alloy in an amount greater than about 5.0 atomic percent.

Claim 54 (previously presented): The coating of claim 53, comprising tin.

Claim 55 (canceled)

Claim 56 (canceled)

Claim 57 (canceled)

Claim 58 (previously presented): The coating of claim 53, wherein said silver is in an amount of between approximately 55% by weight and approximately 95% by weight.

Claim 59 (previously presented): The coating of claim 58, wherein said silver is in an amount of between approximately 90% by weight and approximately 95% by weight.

Claim 60 (canceled)

Claim 61 (previously presented): The coating of claim 54, wherein said silver is between approximately 55% by weight and approximately 95% by weight.

Claim 62 (previously presented): The coating of claim 61, wherein said silver is between approximately 90% by weight and approximately 95% by weight.

Claim 63 (canceled)

Claim 64 (canceled)

Claim 65 (canceled)

Claim 66 (canceled)

Claim 67 (canceled)

Claim 68 (canceled)

Claim 69 (canceled)

Claim 70 (previously presented): The coating of claim 53, wherein said zinc is in an amount of between approximately 0.1% by weight and approximately 10% by weight.

Claim 71 (previously presented): The coating of claim 70, wherein said zinc is in an amount of between approximately 0.25% by weight and approximately 5% by weight.

Claim 72 (canceled)

Claim 73 (previously presented): The coating of claim 54, wherein said zinc is in an amount of between approximately 0.01% by weight and approximately 10% by weight.

Claim 74 (previously presented): The coating of claim 73, wherein said zinc is in an amount of between approximately 0.25% by weight and approximately 5% by weight.

Claim 75 (canceled)

Claim 76 (canceled)

Claim 77 (canceled)

Claim 78 (canceled)

Claim 79 (canceled)

Claim 80 (canceled)

Claim 81 (canceled)

Claim 82 (previously presented): The coating of claim 54, wherein said tin is between approximately 0.01% by weight and approximately 10% by weight.

Claim 83 (previously presented): The coating of claim 82, wherein said tin is between approximately 0.01% by weight and approximately 2% by weight.

Claim 84 (canceled)

Claim 85 (canceled)

Claim 86 (canceled)

Claim 87 (canceled)

Claim 88 (currently amended): The coating of claim 55 53, comprising silicon in an amount of between approximately 0.01% by weight and approximately 10% by weight.

Claim 89 (previously presented): The coating of claim 88, comprising silicon in an amount of between approximately 0.01% by weight and approximately 1% by weight.

Claim 90 (canceled)

Claim 91 (canceled)

Claim 92 (canceled)

Claim 93 (currently amended): A reflective or semi-reflective coating for optical storage media, low emissivity glass, transparent conductive displays, and electro-chromic mirrors, said coating comprising an alloy comprising:

silver in an amount of between approximately 45% by weight and approximately 99.9% by weight;

copper in an amount of between approximately 0.01% by weight and approximately 55% by weight; and

at least one metal selected from the group consisting of silicon >>and and tin in an amount of between approximately 0.01% by weight and 30% by weight[[.]];

wherein copper is present in said alloy in an amount greater than about 5.0 atomic percent.

Claim 94 (previously presented): The coating of claim 93, comprising tin.

Claim 95 (previously presented): The coating of claim 93, comprising silicon.

Claim 96 (previously presented): The coating of claim 94, further comprising silicon.

Claim 97 (canceled)

Claim 98 (previously presented): The coating of claim 93, wherein said silver is in an amount of between approximately 55% by weight and approximately 95% by weight.

Claim 99 (previously presented): The coating of claim 98, wherein said silver is in an amount of between approximately 90% by weight and approximately 95% by weight.

Claim 100 (canceled)

Claim 101 (previously presented): The coating of claim 94, wherein said silver is between approximately 55% by weight and approximately 95% by weight.

Claim 102 (previously presented): The coating of claim 101, wherein said silver is between approximately 90% by weight and approximately 95% by weight.

Claim 103 (canceled)

Claim 104 (previously presented): The coating of claim 95, wherein said silver is between approximately 55% by weight and approximately 95% by weight.

Claim 105 (previously presented): The coating of claim 104, wherein said silver is between approximately 90% by weight and approximately 95% by weight.

Claim 106 (canceled)

Claim 107 (previously presented): The coating of claim 96, wherein said silver is between approximately 55% by weight and approximately 95% by weight.

Claim 108 (previously presented): The coating of claim 107, wherein said silver is between approximately 90% by weight and approximately 95% by weight.

Claim 109 (canceled)

Claim 110 (previously presented): The coating of claim 93, wherein said copper is between approximately 0.01% by weight and approximately 10% by weight.

Claim 111 (previously presented): The coating of claim 110, wherein said copper is between approximately 0.25% by weight and approximately 5% by weight.

Claim 112 (canceled)

Claim 113 (previously presented): The coating of claim 94, wherein said copper is between approximately 0.01% by weight and approximately 10% by weight.

Claim 114 (previously presented): The coating of claim 113, wherein said copper is between approximately 0.25% by weight and approximately 5% by weight.

Claim 115 (canceled)

Claim 116 (previously presented): The coating of claim 95, wherein said copper is between approximately 0.01% by weight and approximately 10% by weight.

Claim 117 (previously presented): The coating of claim 116, wherein said copper is between approximately 0.25% by weight and approximately 5% by weight.

Claim 118 (canceled)

Claim 119 (previously presented): The coating of claim 96, wherein said copper is between approximately 0.01% by weight and approximately 10% by weight.

Claim 120 (previously presented): The coating of claim 119, wherein said copper is between approximately 0.25% by weight and approximately 5% by weight.

Claim 121 (canceled)

Claim 122 (previously presented): The coating of claim 94, wherein said tin is between approximately 0.01% by weight and approximately 10% by weight.

Claim 123 (previously presented): The coating of claim 122, wherein said tin is between approximately 0.01% by weight and approximately 2% by weight.

Claim 124 (canceled)

Claim 125 (previously presented): The coating of claim 96, wherein said tin is between approximately 0.01% by weight and approximately 10% by weight.

Claim 126 (previously presented): The coating of claim 125, wherein said tin is between approximately 0.01% by weight and approximately 2% by weight.

Claim 127 (canceled)

Claim 128 (previously presented): The coating of claim 95, comprising silicon in an amount of between approximately 0.01% by weight and approximately 10% by weight.

Claim 129 (previously presented): The coating of claim 128, comprising silicon in an amount of between approximately 0.01% by weight and approximately 1% by weight.

Claim 130 (canceled)

Claim 131 (previously presented): The coating of claim 96, comprising silicon in an amount of between approximately 0.01% by weight and approximately 10% by weight.

Claim 132 (previously presented): The coating of claim 131, comprising silicon in an amount of between approximately 0.01% by weight and approximately 1% by weight.

Claim 133 (new): The coating of claim 53, wherein said copper is between approximately 0.01% by weight and approximately 10% by weight.

Claim 134 (new): The coating of claim 133, wherein said copper is between approximately 0.25% by weight and approximately 5% by weight.

Claim 135 (new): The coating of claim 54, wherein said copper is between approximately 0.01% by weight and approximately 10% by weight.

Claim 136 (new): The coating of claim 135, wherein said copper is between approximately 0.25% by weight and approximately 5% by weight.

Claim 133 (withdrawn): An optical storage medium comprising the coating of claim 1.

Claim 134 (withdrawn): An optical storage medium comprising the coating of claim 53.

Claim 135 (withdrawn): An optical storage medium comprising the coating of claim 93.

Claim 136 (withdrawn): A low emissivity glass comprising the coating of claim 1.

Claim 137 (withdrawn): A low emissivity glass comprising the coating of claim 53.

Claim 138 (withdrawn): A low emissivity glass comprising the coating of claim 93.

Claim 139 (withdrawn): A transparent conductive display comprising the coating of claim 1.

Claim 140 (withdrawn): A transparent conductive display comprising the coating of claim 53.

Claim 141 (withdrawn): A transparent conductive display comprising the coating of claim 93.

Claim 142 (withdrawn): An electro-chromic mirror comprising the coating of claim 1.

Claim 143 (withdrawn): An electro-chromic mirror comprising the coating of claim 53.

Claim 144 (withdrawn): An electro-chromic mirror comprising the coating of claim 93.

Claim 145 (withdrawn): A method for physical deposition of a reflective or semi-reflective coating onto a substrate comprising the steps of:

providing a coating alloy comprising silver in the amount of between approximately 45% by weight and approximately 99.9% by weight, zinc in the amount of between approximately 0.01% by weight and approximately 55% by weight and copper in the amount of between approximately 0.01% by weight and approximately 55% by weight; and

physically depositing the coating on the substrate.

Claim 146 (withdrawn): The method of claim 145, wherein the coating alloy further comprises tin.

Claim 147 (withdrawn): The method of claim 145, wherein the coating alloy further comprises silicon.

Claim 148 (withdrawn): The method of claim 146, wherein the coating alloy further comprises silicon.

Claim 149 (withdrawn): The method of claim 145, wherein the step of physically depositing comprises utilizing at least one deposition technique selected from the group consisting of sputtering, thermal evaporation, physical vapor deposition, electrolytic plating, and electroless plating.

Claim 150 (withdrawn): A method for physical deposition of a reflective or semi-reflective coating onto a substrate comprising the steps of:

providing a coating alloy comprising silver in the amount of between approximately 45% by weight and approximately 99.9 % by weight, zinc in the amount of between approximately 0.01% by weight and approximately 55% by weight and at least one component selected from the group consisting of silicon in the amount of between approximately 0.01% by weight and approximately 30% by weight and tin in the amount of between approximately 0.01% by weight and approximately 30% by weight; and
physically depositing the coating on the substrate.

Claim 151 (withdrawn): The method of claim 150, wherein the coating alloy comprises tin.

Claim 152 (withdrawn): The method of claim 150, wherein the coating alloy comprises silicon.

Claim 153 (withdrawn): The method of claim 151, wherein the coating alloy further comprises silicon.

Claim 154 (withdrawn): The method of claim 150, wherein the step of physically depositing comprise utilizing at least one deposition technique selected from the group consisting of sputtering, thermal evaporation, physical vapor deposition, electrolytic plating, and electroless plating.

Claim 155 (withdrawn): A method for physical deposition of a reflective or semi-reflective coating onto a substrate comprising the steps of:

providing a coating alloy comprising silver in the amount of between approximately 45% by weight and approximately 99.9% by weight, copper in the amount of between approximately 0.01% by weight and approximately 55% by weight and at least one component selected from the group consisting of silicon in the amount of between approximately 0.01% by weight and approximately 30% by weight and tin in the amount of between 0.01% by weight and approximately 30% by weight; and
physically depositing the coating on the substrate.

Claim 156 (withdrawn): The method of claim 155, wherein the coating alloy comprises.

Claim 157 (withdrawn): The method of claim 155, wherein the coating alloy comprises silicon.

Claim 158 (withdrawn): The method of claim 156, wherein the coating alloy further comprises silicon.

Claim 159 (withdrawn): The method of claim 155, wherein the step of physically depositing comprises utilizing at least one deposition technique selected from the group consisting of sputtering, thermal evaporation, physical vapor deposition, electrolytic plating, and electroless plating.